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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/435,767	11/08/1999	NOBUYUKI KOBAYASHI	104700	5663

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OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

FLANDERS, ANDREW C

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/435,767

Applicant(s)

KOBAYASHI ET AL.

Examiner

Andrew C. Flanders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-24 is/are pending in the application.
- 4a) Of the above claim(s) 1, 4-14 and 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10 June 2005 have been fully considered but they are not persuasive.

Applicant alleges:

"It is respectfully submitted that the subject matter of all species is sufficiently related that a thorough search for the subject matter of any one species would encompass a search for the subject matter of the remaining species."

Examiner respectfully disagrees. First, the subject matter of groups I, II, III and IV are not sufficiently related. Group I includes outputting means, Group II includes memory detection means, Group III includes playback means and Group IV includes memory zone means. Per MPEP Section 806.05 (d), the outputting means in Group I are not required by Groups II, III and IV to function. The memory detection means in Group II are not required by Groups I, III and IV to function. The playback means in Group III are not required by Groups I, II and IV to function. The memory zone means in Group IV are not required by Groups I, II and III to function.

Applicant further alleges:

"Thus, it is respectfully submitted that the search and examination of the entire application could be made without serious burden. See MPEP (Section) 803 in which it is stated that "if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions" (emphasis added). It is respectfully submitted that this policy should apply in the present application in order to avoid unnecessary delay and expense to Applicants and duplicative examination by the Patent Office."

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Examiner respectfully disagrees. The subject matter in the Groups is sufficiently different to require a multiple classification such, thus placing a serious burden on the examiner to complete a thorough search. The search for the outputting means in Group I would require a search in class 709/227 and its related areas. The search for the memory detection means in Group II would require a search in class 711/115 and its related areas. The search for the playback means in Group III would require a search in class 700/88 and its related areas. The search for the memory zone means in Group IV would require a search in class 711/173 and its related areas. As such, the arguments are not persuasive and the restriction is made final. Group III, claims 15 – 21 will be examined.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "said automatically started single file repeat reproduction mode" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim. It appears to the examiner that this limitation is contained within claim 20 and claim 21 should actually depend on claim 20 instead of claim 15, thus creating antecedent basis for this limitation. For the purpose of expediting prosecution,

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the claim will be understood to depend upon claim 20. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15 - 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terui (U.S. Patent 5,903,871) in view of Yankowski (U.S. Patent 6,038,199).

Regarding **Claim 15**, Terui discloses:

A digital audio recording and reproducing apparatus (title and abstract) comprising:

an A/D converter for converting an analog audio signal collected by a microphone into digital audio data (Fig. 1 element 4);

a digital compression circuit for compressing said digital audio data into compressed digital audio data (i.e. the DSP element 5 of Fig. 1 compressively transforms the audio data; col. 3 lines 25 – 30);

an internal solid state memory for storing compressed digital audio files (i.e. the recording medium; element 10 of Fig. 1);

a digital decompression circuit for decompressing said compressed for decompressing said compressed digital audio data read out of said internal solid state memory to generate decompressed digital audio data (i.e. the DSP element 5 of Fig. 1 decompressively transforms the encoded audio data; col. 3 lines 32 – 36);

a D/A converter for converting said decompressed digital audio data into an analog audio signal (Fig. 1 element 11);

a reproducing means for reproducing said analog audio signal supplied from said D/A converter (Fig. 1 element 13).

Terui does not disclose in the first embodiment (Fig. 1) an external memory connecting terminal for connecting detachably an external solid state memory for storing said compressed digital audio data instead of or together with said internal solid state memory.

However, Terui does disclose in the second embodiment (Fig. 6) an external memory connecting terminal for connecting detachably an external solid state memory for storing said compressed digital audio data in stead of or together with said internal solid state memory (Fig. 6 element 38).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of the detachable memory Terui's second embodiment to the teachings in Terui's first embodiment. One would have been motivated to do so to be able to use the data stored in the memory in a device such as the disclosed third embodiment (Fig. 17). It would be desirable use this removable memory card so a

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secretary or typist can efficiently document a voice file recorded in a flash memory card;
col. 13 lines 15 – 21.

Further, the modification of Terui does not disclose a normal reproduction mode in which a single digital audio data file selected from digital audio data files stored in said internal solid state memory and/or external solid state memory is reproduced only once;

a single file repeat mode in which a single digital audio data file selected from digital audio data files stored in said internal solid state memory and/or external solid state memory is reproduced repeatedly;

a plural file continuous repeat mode in which a plurality of digital audio data files stored in said internal solid state memory and/or external solid state memory are successively reproduced only once; and

a plural file repeat mode in which a plurality of digital audio data files stored in said internal solid state memory and/or external solid state memory are successively reproduced in a repeated manner.

Yankowski discloses:

a normal reproduction mode in which a single digital audio data file selected from digital audio data files stored in said internal solid state memory and/or external solid state memory is reproduced only once;

a single file repeat mode in which a single digital audio data file selected from digital audio data files stored in said internal solid state memory and/or external solid state memory is reproduced repeatedly;

a plural file continuous repeat mode in which a plurality of digital audio data tiles stored in said internal solid state memory and/or external solid state memory are successively reproduced only once; and

a plural file repeat mode in which a plurality of digital audio data files stored in said internal solid state memory and/or external solid state memory are successively reproduced in a repeated manner.

Yankowski discloses a play list for playing back digital audio files. A user may add a single file to this list and play it once, i.e. normal reproduction mode, multiple files and play them once, i.e. a plural file continuous repeat mode, and a repeat mode for the play list. Applying this repeat mode to the single file would repeat the one file, i.e. a single file repeat mode, applying this repeat mode to a play list with multiple files would repeat the multiple files, i.e. a plural file repeat mode; see col. 9 lines 36 – 67 and col. 10 lines 4 – 24.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Yankowski's digital audio file play list to the digital audio files produced by the modification of Terui. One would have been motivated to do so in order to efficiently control the playback of the files stored on the modification of Terui. It would be desirable to easily play a single file, multiple files and repeat them accordingly to discern an unclear recording or to practice a foreign language to assist in learning that language.

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Regarding **Claim 16**, in addition to the elements stated above regarding claim 15, the combination of Terui in view of Yankowski further discloses:

wherein in said plural file repeat reproduction mode, all digital audio files stored in said internal solid state memory and/or external solid state memory are successively reproduced in a repeated manner (i.e. adding all of the files to Yankowski's play list and adding the repeat command would in effect cause the combination to operate in this manner).

Regarding **Claim 17**, in addition to the elements stated above regarding claim 15, the combination of Terui in view of Yankowski further discloses:

wherein in said plural file repeat reproduction mode, a plurality of digital audio data files selected from all digital audio data files stored in said internal solid state memory and/or external solid state memory are successively reproduced in a repeated manner (i.e. the user adds the files to Yankowski's play list and adding the repeat command would in effect cause the combination to operate in this manner).

Regarding **Claim 18**, in addition to the elements stated above regarding claim 15, the combination of Terui in view of Yankowski further discloses:

wherein in said plural file repeat reproduction mode, the order of reproducing a plurality of digital audio data files is set by a user (i.e. the user generates the play list; col. 9 lines 35 – 40 in Yankowski).

Regarding **Claim 19**, in addition to the elements stated above regarding claim 15, the combination of Terui in view of Yankowski further discloses:

wherein a plurality of digital audio files are stored in said internal solid state memory and/or external solid state memory with ordinal file numbers (i.e. a file number (0001 to 9999) is written at a predetermined position in the index information area; col. 10 lines 20 and 21 in Terui),

and in said plural file continuous reproduction mode, a plurality of digital audio files from a digital audio file having a file number denoted by a user to a digital audio file having the last file number are successively reproduced (i.e. the user adds songs to the play list; col. 9 lines 35 – 40 in Yankowski. It is obvious that if the user adds 10 files to the list, they will be in a numbered order. Playing this list will then successively reproduce them in the numbered order).

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terui (U.S. Patent 5,903,871) in view of Yankowski (U.S. Patent 6,038,199) and in further view of Morio (U.S. Patent 5,218,640).

Regarding **Claim 20**, in addition to the elements stated above regarding claim 15, the combination of Terui in view of Yankowski fails to disclose the limitations of claim 20. Morio discloses:

wherein during said plural file continuous reproduction mode or plural file repeat reproduction mode, when a repeat button is operated by a user in response to a

reproduction of a desired speech, said plural file continuous reproduction mode or plural file repeat reproduction mode is automatically interrupted and said single file repeat reproduction mode is automatically started to reproduce repeatedly a currently reproduced digital audio file (Looking to Fig. 7 in Morio, there are 3 segments of stored voice with 4 mid points, A, B, C and D. If a user is playing from A to D, thus crossing over B and C, and hears a portion of speech they wish to repeat, say the segment between B and C, the user presses the rewind button and the system automatically re-cues the playback to point B; see Fig 7 and col. 9 lines 25 – 62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use a repeat method as disclosed by Morio on the combination of Terui in view of Yankowski. One would have been motivated to do so in order to efficiently control the playback of the files stored on the modification of Terui. Again, it would be desirable to interrupt playback and repeat a stored message accordingly to discern an unclear recording or to practice a foreign language to assist in learning that language.

Regarding **Claim 21**, in addition to the elements stated above regarding claim 20, the combination of Terui, in view of Yankowski in further view of Morio further discloses:

wherein when said automatically started single file repeat reproduction mode is stopped in response to a user's operation, the interrupted plural file continuous reproduction mode or plural file repeat reproduction mode is restarted (Looking again to Fig. 4 of Morio, if the user determines they are done repeating the playback of the

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desired file, the user refrains from pressing the rewind key and the playback continues as before to point D).


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Pawlowski (U.S. Patent 6,038,199).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600
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